## REMARKS

Upon entry of this Amendment, claims 1-4, 9-16 and 19-25 will be pending, of which claims 1, 19, 22 and 25 will have been amended, and claim 17 will have been canceled without prejudice or disclaimer. In this latter regard, claims 5-8 and 17-18 now stand canceled without prejudice or disclaimer. In view of the herein-contained amendments and remarks, Applicants respectfully submit that each of the pending claims is allowable for at least the reasons provided below.

In the Official Action mailed October 16, 2006, the Examiner presents nine separate grounds for rejection. Namely, the Examiner rejects claims 19, 22 and 25 under 35 U.S.C. §112, first paragraph, for lack of enablement; claims 1 and 17, under 35 U.S.C. §103, as being unpatentable over MASAND in view of WHITE; claims 2 and 4, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of TAN; claim 3, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of TAN2; claims 9 and 10, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of ALAM; claims 11, 12 and 16, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of REGISTER; claims 13-15, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of GLIER; claims 19 and 20, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of SALGADO; and claims 21-25, under 35 U.S.C. §103, as being unpatentable over MASAND, WHITE and SALGADO in view of GLIER. Applicants respectfully traverse all grounds of rejection, at least for the reasons provided below, and request reconsideration and withdrawal of the same, and an indication of allowability of all pending claims in the next Official correspondence.

Applicants respectfully traverse the rejection of claims 19, 22 and 25 under 35 U.S.C. §112, first paragraph, for lack of enablement. Although Applicants disagree with the propriety of this rejection, in an effort to expedite prosecution, Applicants herein amend claims 19, 22 and 25 to recite a "knowledge acquisition mode," which has enabling support, for example, at page 7, line 1 *et seq.* of the specification. Thus, the above-noted rejection under Section 112 is rendered moot by the herein contained amendments. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 19, 22 and 25 under Section 112, first paragraph, and an indication of allowability by the Examiner in the next Official correspondence.

Applicants respectfully traverse the rejection of claims 1 and 17, under 35 U.S.C. §103, as being unpatentable over MASAND in view of WHITE. In this regard, Applicants submit that MASAND and WHITE, whether taken alone or in any proper combination, fail to teach or suggest, *inter alia*, a "classifier operable on the extracted features to process the document in a knowledge acquisition mode in which each association of a classification with the document is added incrementally to a knowledge base and . . . , the classifier being switchable between the modes under user control for each document," as recited in, for example, claim 1. Further, the rejection of claim 17 is rendered moot by this Amendment since the claim has been canceled without prejudice or disclaimer.

At page 3, lines 18 to 22, the specification discloses:

"The described embodiment provides a document classification apparatus which allows learning to be performed in an incremental way by allowing a system administrator to correct document classification mistakes as they occur, the apparatus learning from these mistakes. By incremental learning of new cases does not require re-learning of previous cases, thus eliminating the need to preserve past cases for re-learning."

At page 32, lines 9 to 14, the specification discloses:

"The system administrator can switch between the classification mode and the knowledge acquisition sub-modes by sending a message together with the appropriate data to the document classifier. The message can be either LEARN, INSERT, or CLASSIFY. Depending on the message received, the document classifier adjusts the input baseline vigilance parameter $\rho_a$ and the output vigilance parameter $\rho_b$ of the ARAM classifier accordingly and carries out the appropriate sequence of actions."

On the other hand, MASAND teaches a "piecemeal approach" (*see e.g.*, column 29, line 63 *et seq.* of MASAND) to constructing a Training Database, which differs from Applicants' claimed, *inter alia, e.g.*, "classifier operable on the extracted features to process the document in a knowledge acquisition mode in which the association of a classification with each document is added incrementally to a knowledge base," as recited in claim 1. A review of the MASAND patent reveals that MASAND trains the Training Database (TDB) 80 in a batch mode. *See e.g.*, column 29, line 63 to column 30, line 39. Particularly, MASAND processes a database of documents in order to train a classification model, which he then uses to classify documents. In MASAND, "piecemeal approach" refers to batch processing of all the records in the database to consider each feature in piecemeal fashion. In claim 1, however, the association of a classification with each document is added incrementally to the knowledge base for each document. Thus, MASAND does not teach or suggest, *inter alia*, a "classifier operable on the extracted features to process the document in a knowledge acquisition mode in which the association of a classification with the document is added incrementally to a knowledge base," as recited, for example, in claim 1.

Further, MASAND does not teach or suggest, alone or in any proper combination, *inter alia*, "the classifier being switchable between the [knowledge

acquisition and document classification] modes under user control for each document," as recited in, for example, claim 1. Instead, MASAND teaches a training system that is used initially, followed by a classification system, each of the systems being used at a different point in time on a batch basis. Assuming, *arguendo*, that MASAND does imply a switch for switching between a training mode and a classification mode (Applicants submit that MASAND does not imply such a switch), the switching would not be performed on a document-by-document basis, but, instead, the switching would be performed on a batch basis. Moreover, MASAND does not teach or suggest why one would switch back from a classification mode to a training mode, much less, the switching being "under user control for each document." Thus, MASAND does not teach or suggest, alone or in any proper combination, *inter alia*, "the classifier being switchable between the [knowledge acquisition and document classification] modes under user control for each document," as recited in, for example, claim 1.

At page 5 of the above-noted Office Action, the Examiner concedes that "MASAND does not teach wherein the threshold is adjustable to match a desired confidence value to allow transition from a state where manual routing is favored to a state that favors automatic routing." The Examiner provides WHITE as a secondary teaching, proffering that WHITE teaches what MASAND lacks. Applicants respectfully disagree. Further, Applicants respectfully submit that one of ordinary skill in the relevant art would not have been motivated to combine MASAND with WHITE, as suggested by the Examiner; and, even if the teachings were combinable, Applicants submit that the resultant combination would still fail to teach or suggest all of the claimed subject matter of, for example, claim 1.

Applicants submit that one of ordinary skill in the art would not have been motivated to combine WHITE with MASAND since MASAND and WHITE are from non-analogous arts, and there would have been no reasonable expectation of success. Particularly, MASAND is directed to a system for classifying natural language data. On the other hand, WHITE is directed to a system for automatically and dynamically redirecting telephone calls in a public telephone network. Applicants submit that one of ordinary skill in the art for the MASAND patent would not have looked to the non-analogous art of WHITE for the above-noted teaching of WHITE relied on by the Examiner. Moreover, any attempt at combining the teachings of MASAND and WHITE would have resulted in a resultant system with no expectation of success. Since there is a lack of any motivation to combine the teachings of MASAND and WHITE, the Examiner has failed to establish a *prima facie* case of obviousness.

Applicants further submit, the Examiner provides no motivation or suggestion to make the claimed combination, which must be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir.). MASAND and/or WHITE do not provide such a motivation or suggestion. Even if MASAND and WHITE could be combined, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). The relied upon references fail to suggest such a desirability. Accordingly, for this additional reason, Applicants submit that the Examiner has improperly combined MASAND with WHITE.

Nevertheless, even if, *arguendo*, the teachings of MASAND and WHITE are combinable (Applicants submit they are not), WHITE does not remedy the insufficiencies found in the teachings of MASAND. WHITE teaches overload protection for on-demand access to the Internet that redirects calls from overloaded Internet service providers (ISP) to alternate Internet access providers. In this regard, WHITE teaches using Advanced Intelligent Network (AIN) triggers to cause a program controlled switch to initiate a query to a remote database (*see e.g.*, column 14, line 7 *et seq.*). The remote database may include current parameter values (such as, for example, "call rate," "busy rate," "quick disconnect rate," "call wait," or "call duration" as shown in FIG. 10) and thresholds (such as, for example, "exceed high threshold," "exceed combination thresh.," etc., as shown in FIG. 10). WHITE does not teach or suggest, alone or in any proper combination, *inter alia*, a "classifier operable on the extracted features to process the document in a knowledge acquisition mode in which the <u>association of a classification with the document is added incrementally to a knowledge base</u> and in a document classification mode in which the classifier, using the knowledge base, is operable to determine a predicted classification for the document, <u>the classifier being switchable between the modes under user control for each document</u> [emphasis added]," as recited, for example, in claim 1.

Thus, Applicants submit (aside from there being a lack of motivation to combine MASAND with WHITE) that the combination of MASAND and WHITE, against their respective teachings, would not to teach or suggest, *inter alia*, a "classifier operable on the extracted features to process the document in a knowledge acquisition mode in which the <u>association of a classification with the document is added incrementally to a</u>

knowledge base and in a document classification mode in which the classifier, using the knowledge base, is operable to determine a predicted classification for the document, the classifier being switchable between the modes under user control for each document [emphasis added]," as recited, for example, in claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection of claim 1 (the rejection of claim 17 being rendered moot upon entry of this Amendment), under Section 103, as being unpatentable over MASAND and WHITE, and an indication of the allowability of claim 1 by the Examiner in the next Official correspondence.

Applicants respectfully traverse the rejection of claims 19 and 20, under 35 U.S.C. §103, as being unpatentable over MASAND and WHITE in view of SALGADO, for at least the following reasons. Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness and has used impermissible hindsight in combining the teachings of MASAND, WHITE and SALAGADO.

As discussed above with respect to the claim 1, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness as required under Section 103. Particularly, Applicants submit that one of ordinary skill in the relevant art would not have been motivated to combine the teachings of MASAND and WHITE, as discussed above, and incorporated herein by reference. Moreover, the person having ordinary skill in the art at the time the invention was made would not have had a reasonable expectation of success in combining MASAND and WHITE since they are from such different, non-analogous arts.

Further, the Examiner concedes (*see e.g.*, page 18, lines 1-4 of the above-noted Official Action) that "Masand, and White do not teach a router operable in one of an automatic or manual mode to route the document to at least one of a plurality of destinations, wherein the router mode is switchable between the modes based on a comparison of the confidence value to a threshold." The Examiner provides SALGADO for a teaching of a router, and suggests that the SALGADO router be combined with the teachings of MASAND and WHITE. As with MASAND and WHITE, SALGADO is directed to a system from a non-analogous art. Aside from MASAND and WHITE being from non-analogous arts, and further being non-combinable with a lack of expectation for success, the SALGADO teachings do not alleviate the shortcomings of the MASAND and WHITE teachings, alone or in any proper combination.

SALGADO is directed to a control system for a sheet handling system having a mailboxing system. Referring to the Abstract, for example, SALGADO teaches a control system that includes a user interface with which one or more print receiving bins of a plurality of print receiving bins are assigned to one of the bin set users. The control system determines, for the bin set user, a frequency of use value varying as a function of a degree to which the one bin set user uses the one or more print receiving bins to which he is assigned and reassigns the one or more print receiving bins when the frequency of use value drops below a preselected threshold.

Applicants submit, the Examiner provides no motivation or suggestion to make the claimed combination, which must be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir.). MASAND, WHITE and/or SALGADO do not provide such a motivation or suggestion. Even if

MASAND and WHITE could be combined with SALGADO, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). The relied upon references fail to suggest such a desirability. Accordingly, for this additional reason, Applicants submit that the Examiner has improperly combined MASAND, WHITE and SALGADO.

Applicants further submit that the further documents relied on by the Examiner, including TAN, TAN2, ALAM, REGISTER and/or GLIER, fail to teach or suggest, alone or in any proper combination, *inter alia*, a "classifier operable on the extracted features to process the document in a knowledge acquisition mode in which the <u>association of a classification with the document is added incrementally to a knowledge base</u> and in a document classification mode in which the classifier, using the knowledge base, is operable to determine a predicted classification for the document, <u>the classifier being switchable between the modes under user control for each document</u> [emphasis added]," as recited, for example, in claim 1. Thus, claims 2-4, 9-16 and 20-25, which depend from claims 1 and 19, are patentably distinguishable for at least the reasons provided above with respect to claim 1 and 19, as well as for additional reasons related to their own recitation.

For at least the reasons set forth above, all of the pending claims are submitted to be in condition for allowance. Thus, Applicants respectfully request withdrawal of all rejections and timely allowance of all of the pending claims.

## SUMMARY AND CONCLUSION

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have done so. Applicants have amended claims 1, 19, 22 and 25 to clarify Applicants' claimed invention. Applicants have pointed out significant and substantial shortcomings of the documents relied upon by the Examiner with respect to the pending claims. Applicants have further discussed the explicitly recited features of Applicants' claims and have noted the shortcomings of the relied upon documents with respect thereto. Accordingly, Applicants have provided a clear evidentiary basis supporting the patentability of all the claims in the present application and respectfully request an indication to such effect in due course.
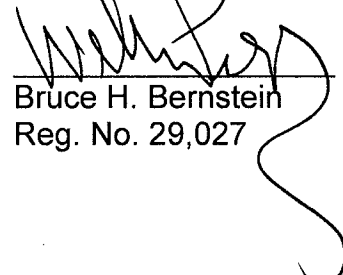
Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this response timely and/or complete. The Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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